Cruz, February 2, 1895, G. F. Breninger (no. 26701), and Sherwood, Mendocino County, September 28, 1908, H. W. Marsden (no. 19524), and three females, Grafton, Yolo County, September 27, 1910, H. W. M. (no. 22989), Paradise, Butte County, March 10, 1906, C. W. Bowman (no. 17980), and Santa Cruz County, January 15, 1895, G. F. Breninger (no. 26702), are referred to this race by Mr. Oberholser; and a male and female collected at Witch Creek, January 16, and November 16, 1906 (nos. 16325, 17256), by Mr. Marsden seem to me indistinguishable.

Passerella iliaca insularis. A male taken at Nicasio, February 18, 1911 (no. 25302), and a female at Felton, Santa Cruz County, January 12, 1892, G. B. Badger (no. 25303), Mr. Oberholser calls this subspecies; and to it I refer also two males, Pescadero, San Mateo County, October 26, 1910 (no. 23006), and Sherwood, Mendocino County, October 13, 1908 (no. 19525), collected by Mr. Marsden.

Zamelodia melanocephala capitalis. In my series of breeding male Black-headed Grosbeaks I find that 3 from Pacheco, Chihuahua, Mexico, and 2 from the Huachuca Mountains (Palmerlee, Cochise County), Arizona, have much larger bills than 10 from different parts of California, between Humboldt and San Diego counties. In the former the exposed culmen averages 19.9 millimeters, with extremes of 19.2 and 20.5, and the depth of bill at base 15.5, with extremes of 15.2 and 15.8; in the latter these measurements are 17, with extremes of 16 and 18.3, and 14.2, with extremes of 13.5 and 15.2. In addition the Chihuahua and Huachuca Mountain birds have the heads more solidly black. A breeding male from Walsh, Alberta, with bill of 17.6 by 14.8, one from Newcastle, Colorado, measuring 17 by 15.2, and a probably migrating male from Tucson, Arizona (May 6, 1907), with bill of 16.1 by 13.1 agree both in size of bill and color of head with California birds and not with the larger bird ascribed by Ridgway to the Rocky Mountains.

Guiraca caerulea salicarius. My few Blue Grosbeaks from California, 3 males and 1 female from Redlands, have the small bill, which Ridgway first noticed was characteristic of California birds. This difference seems to me of fully as much value as the different shade of blue and slightly larger size by which *lazula* differs from *caerulea*.

Lanius borealis invictus. A comparison of 26 Northern Shrikes in my collection from the Magdalen Islands, Connecticut, New York, North Carolina and Ontario, with 17 from British Columbia, Montana, North Dakota and Colorado shows that the western birds in the same stage of plumage have the upper parts a paler shade of gray, less vermiculation on the breast, with the white areas of wings, tail, rump and scapulars larger, as claimed for this race.

A PARTIAL LIST OF THE SUMMER RESIDENT LAND BIRDS OF MONTEREY COUNTY, CALIFORNIA

By J. R. PEMBERTON and H. W. CARRIGER

WITH MAP AND FIVE PHOTOS

IN GLANCING over the many volumes of THE CONDOR one can not help but be struck with the fact that Monterey County has been sadly neglected by bird students. There have been published in our magazine just two general articles on the birds of this region and two small notices in the field-and-study de-

partment relating to the occurrences of two interesting species. While other counties of this state have been exceedingly popular with ornithologists, and the avifauna in most cases well written up, this county has scarcely been touched. And furthermore it is one of the most accessible of the coastal counties and a great deal more so than some of the Sierran divisions. And further than this it is one of the most interesting of all the coastal counties in the matter of its bird-life.

H. O. Jenkins in his paper in THE CONDOR, vol. VIII, pages 122-130, pointed out one very important fact regarding the country, as follows: "The region traversed was particularly interesting in that it was found to be the southern limit of the Humid Coast Belt of California. Several northern plants and animals find their southern limits in this place and some northern forms intergrade through this region with closely allied southern forms." This of course pertains only to that part of the county lying along the coast and more properly within the Transition zone, not to the flora and fauna of the Sonoran zones which lie within the county.

The basis of the present paper consists of field notes and specimens collected during two trips made by Mr. Pemberton. The first trip was made by Mr. Pemberton in company with M. P. Anderson between December 20, 1903, and January 6, 1904, and involved an excursion from Monterey southward along the coast to Posts and return. A fairly representative collection of the winter birds and mammals was made on this trip, and some 70 species of birds were noted. The second trip was made in the summer of 1909 between the dates May 15 and June 6, and the itinerary took the party from Kings City in the eastern part of the county westward to the coast in the vicinity of Lucia, then northward along the coast to near Posts and a return to Kings City to the north of the route followed in the first part of the journey. The party on this trip consisted of H. W. Carriger, G. A. Macready, Dr. J. P. Smith and J. R. Pemberton. Carriger and Pemberton were collecting birds, while Macready studied geology and Dr. Smith caught trout. Just in passing it may be stated that trout fishing in this region is of a superfine quality, there being many many more fish than there are fishermen, the reverse being the case in many parts of the state.

On this second trip a rather complete list of the land birds of the Transition and Upper Sonoran zones was made, and from this list the present paper has been written.

Monterey county, lying about the middle of the state and directly on the Pacific coast, is about 100 miles long with an average width of about 30 miles. The coastal third consists of a lofty range of mountains dropping directly into the sea, and it is here that climatic conditions of the moist, coastal zone of the more northern parts of the state reach their southern limit. South of this region the coastal zone lies in the San Diegan faunal area, the flora and fauna being very different. Jenkins has well shown the character of the coastal belt of Monterey County and given a list of the plants of the different vertical zones along the seacoast. Suffice it to say that this coastal part of the county lies in the Transition zone.

The eastern side of the county consists of a low, rolling, rather bare range of hills, broken about the middle of the county by a wide valley, a part of the central Salinas Valley.

In the center of the county lies another range of mountains parallel to the eastern and western ranges and more or less connected to the western range in the center of the county where the mountains are the highest. It is in this range

that the highest peak of the county, and one of the most lofty of the coast ranges, lies. This is Santa Lucia peak, 5,967 feet in elevation. While lying some 12 miles from the coast, it is included in the Transition zone. The peak is well forested with several species of pines, and is the home of numerous birds of the Transition zone.

The greater part of the county lies in the Upper Sonoran zone and consists of the inter-mountain valleys and the greater part of the central and eastern ranges. The flora consists principally of the oaks, yuccas, willows, sycamores, berries, lupines, and various plants typical of the chaparral areas of the coast ranges.

In the central valley, along the Salinas River, conditions are such that the flora and fauna belong to the Lower Sonoran zone. The zone is narrow and re-

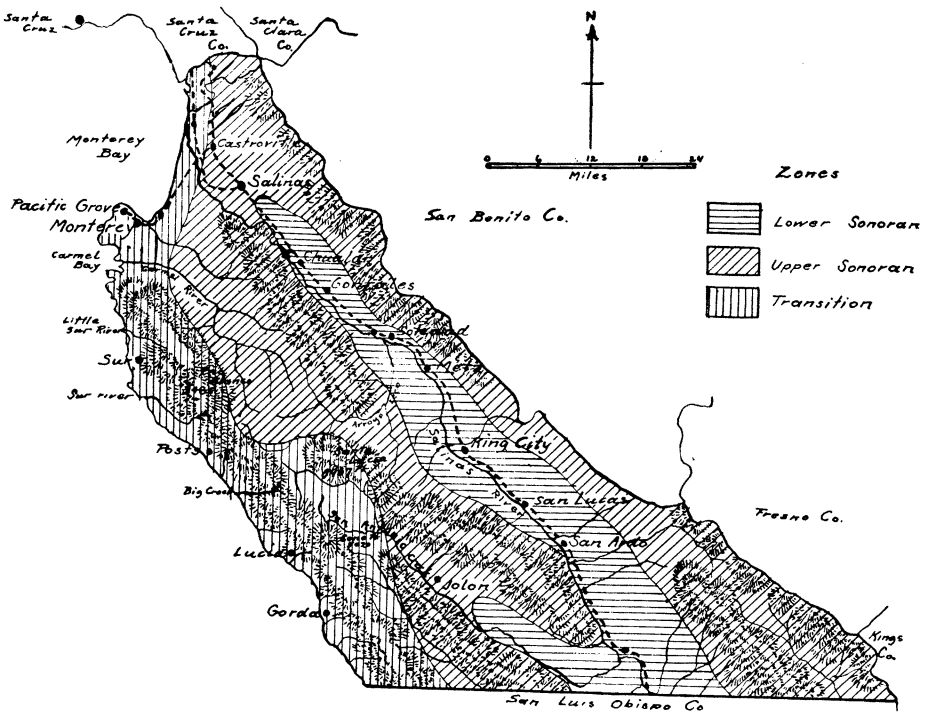

Fig. 64. MAP OF MONTEREY COUNTY, CALIFORNIA, SHOWING THE LIFE ZONES

stricted to the immediate valley. The fauna was not studied by our party in sufficient detail to warrant giving a list of the species known to be typical of this zone.

Thus in general it may be seen that this county is extremely varied in its composition and that there would naturally be a large avifauna within its confines. The map accompanying this paper gives an idea of distribution of the mountains and valleys and of the life zones. The photos show some of the characteristics of each of these zones and it is to be hoped that the following list of the summer residents of the county may lead some one to become interested in the county and after a few trips be able to give us a more complete list of all the interesting species of birds found throughout the year. Dr. J. Grinnell in his paper in THE CONDOR, vol. IV, pp. 125-128, has given a delightful description

of the general conditions to be found there in summertime, and his list of species shows what may be expected should anyone make a thorough study.

Before giving the general list of birds noted, the following two lists will show in general what the typical species of the zones are.

SOME UPPER SONORAN SPECIES; LAND BIRDS ONLY

Roadrunner
Burrowing Owl
Dusky Poor-will
California Thrasher
Phainopepla
California Shrike
Yellow-billed Magpie
Long-tailed Chat
Bullock Oriole
Bi-colored Redwing
Western Meadowlark
Willow Goldfinch
Green-backed Goldfinch
California Linnet
Black-chinned Sparrow
Bell Sparrow
California Brown Towhee

SOME TRANSITION SPECIES; LAND BIRDS ONLY

Mountain Quail
Band-tailed Pigeon
Pacific Horned Owl
California Pigmy Owl
Cabánis Woodpecker
Olive-sided Flycatcher
Monterey Hermit Thrush
American Dipper
Western Bluebird
Cassin Vireo
Coast Jay
Tawny Creeper
Audubon Warbler
Black-throated Gray Warbler
Western Tanager
Pine Siskin
Point Pinos Junco

Gymnogyps californianus. California Condor. On May 27 Carriger saw a single bird sail majestically over our camp on Big Creek and disappear into the high mountains to the east. Mr. Gamboa, a cattle rancher, stated that a few years ago the birds were fairly common in the summer and usually left in the winter. In 1910 he counted fifteen around a dead cow. Usually in evidence during each month of the year and certainly nest in the county. Mr. Gamboa said that the ranchers do not persecute the birds when seen about a dead cow as they know that they are purely scavengers.

Cathartes aura septentrionalis. Turkey Vulture. Buzzards were commonly seen over the entire territory covered and were especially numerous in the oak-covered valley northwest of Jolon. According to the Indians and older Spaniards who still live in the mountains these birds nest commonly each year in the hills near the coast and not on the eastern side of the range. We found them fairly tame and one photo which we took shows a group of seven resting in a dead tree.

Falco mexicanus. Prairie Falcon. One bird was noted on May 16 near Jolon. This bird was swiftly flying through the oak trees and evidently hunting. Noted also on Santa Lucia peak. A bird was seen on May 27 to sail into a flock of sea gulls flying near the beach and strike one of them to the sand. After performing the trick the bird flew away, evidently not caring to eat his prey. Perhaps he was only practicing.

Falco sparverius sparverius. American Sparrow Hawk. This hawk was not so common as would be expected, only a few being seen. They were all in the Jolon valley and kept away from the pine and redwood zone of the coast ranges. For several days we noted their absence and kept on the lookout for them, expecting that perhaps they were absent in the Transition zone; but on May 19 while climbing Santa Lucia Peak we saw a few birds.

Accipiter velox. Sharp-shinned Hawk. Noted on Santa Lucia Peak and along the seacoast in the vicinity of Big Creek. Not a very common bird.

Accipiter cooperi. Cooper Hawk. One bird seen in the vicinity of Jolon.

Buteo borealis calurus. Western Red-tailed Hawk. Noted throughout the region but in very sparing numbers. Pairs were nesting along the eastern foothills of the coast range in the pines and larger oaks. In the wooded parts of the western slopes a few were seen flying, and perched on tall stumps. This bird gets its usual food in the open country, and it must be difficult for it to get a good meal in the forested region unless it eats grasshoppers.

Aquila chrysaetos. Golden Eagle. Three birds were noted in the Jolon valley.

Haliaeetus leucocephalus leucocephalus. Southern Bald Eagle. This bird was noted on the winter trip near the mouth of the Little Sur River. A pair was seen perched on a dead tree near the ocean. In the summer the bird was not seen; but Mr. Gamboa had killed one a few weeks before we got to the coast. There is no doubt that the bird breeds in this region.

Oreortyx picta plumifera. Mountain Quail. Noted on the upper slopes of Santa Lucia Peak above 4000 feet, at the head of the Jolon valley, and in the coniferous forests near Cone Peak. It was not a common bird, but its loud whistling note was frequently heard. Several times the birds were seen very close by, remaining absolutely motionless while the observer approached to within twenty feet, when they would fly away with a great show of speed.

Lophortyx californica californica. California Quail. A common bird in the Upper Sonoran zone in the Jolon valley and also on the slopes of Santa Lucia Peak where it was noted as high as 4000 feet. It was not seen on the coast side, though on the winter trip it was a common bird all over the coastal hills. It must occur in summer on the

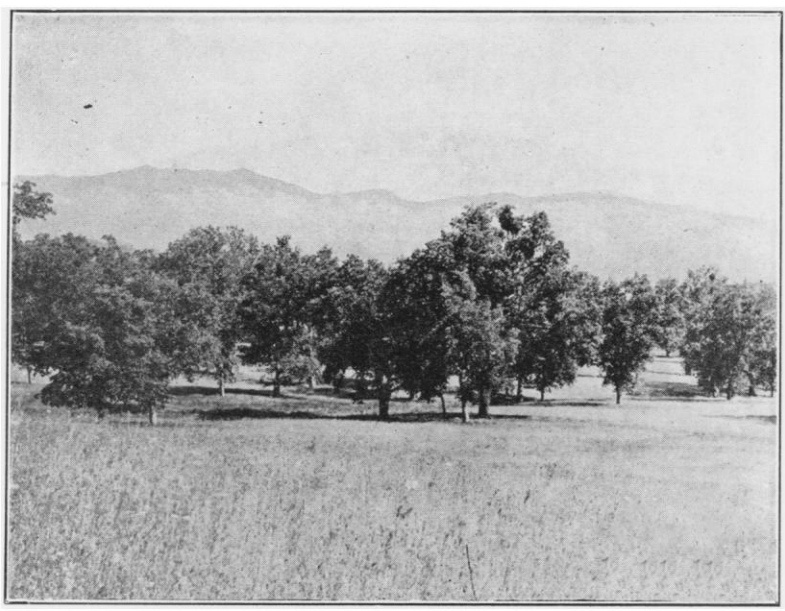

Fig. 65. VALLEY OF UPPER SAN ANTONIO CREEK, MONTEREY COUNTY, CALIFORNIA; HOME OF THE YELLOW-BILLED MAGPIE AND PHAINOPEPLA

western side of the mountains, but our observations would indicate only in very small numbers.

Columba fasciata fasciata. Band-tailed Pigeon. These birds were fairly common on the slopes of Santa Lucia Peak, where they were seen in small bands of about six birds each. Then on the western slopes of the coastal ranges in the groves of oaks and bay trees they were numerous, and nesting the first week of June. Throughout the redwood zone they were occasionally seen, but always singly. They prefer the eastern side of the mountains evidently.

Zenaidura macroura marginella. Western Mourning Dove. Fairly common in the Upper Sonoran in the Jolon valley, though not seen on the ocean side of the mountains. They were seen in the winter in the vicinity of the Sur River.

Geococcyx californianus. Roadrunner. One of these interesting birds was noted near King City on the return trip. It was in the open valley of the Salinas River in the Lower Sonoran zone. Seen also near Carmel.

Ceryle alcyon. Belted Kingfisher. This is a common bird on the smaller streams

which enter the ocean and also on some of the streams which flow eastward from the coast ranges, notably San Antonio Creek. Practically all of the streams of this county have trout in them, and in general everywhere there are trout the Kingfisher is present also.

Aluco pratincola. Barn Owl. A freshly killed specimen of this bird was seen beside the road on the return trip about half way from Jolon to King City; ranchers near San Antonio Creek described this bird as having nested the year before in one of the old hollow trees near the ranch house.

Otus asio bendirei. California Screech Owl. Noted on the winter trip all along the coast. Several were seen and its cry frequently heard in the night. At Jolon and near the summit of Santa Lucia Peak the cry was also heard. During the summer trip none was actually seen, but there seems to be no doubt as to the cry of this bird, which is different from the other owls, having been the one which was so frequently heard.

Bubo virginianus pacificus. Pacific Horned Owl. This bird was heard hooting nearly everywhere in the mountainous part of the county. During the winter trip it was also heard all along the coast. Once on Big Creek we tried imitating the call and were so successful that a bird came to within a few yards of our camp. Possibly it was a young bird of the year.

Speotyto cunicularia hypogaea. Burrowing Owl. On the winter trip several were noted on the bare hillsides near the ocean north of the Little Sur River. On the summer trip it was only seen in the Upper Sonoran zone in the Jolon valley and was not a common bird at all. Most certainly does not live on the ocean coast south of the Little Sur River.

Glaucidium gnoma californicum. California Pigmy Owl. Specimens were taken on the winter trip in the Sur River canyon. Noted also by Grinnell in summer in the same region. While not seen by the writers on the summer trip, there is no doubt of its occurring in the wooded parts of the coastal mountains.

Phalaenoptilus nuttalli californicus. Dusky Poor-will. Noted and collected by Jenkins on the Little Sur River in June, and noted by Grinnell in July. On our summer trip we did not encounter the bird in the Transition zone, though it was fairly common in the Jolon region. Also on the slopes of Santa Lucia Peak we heard it calling in the night. It is such a secretive bird that it is only by accident that one would be seen in the wooded parts of the coast mountains.

Calypte anna. Anna Hummingbird. This bird was seen everywhere we went; in the dry valley at Jolon, on the summit of Santa Lucia Peak, and in the redwood and yellow pine forests. It seemed to prefer the open sage-covered hillsides where there was much forest nearby. Jenkins speaks of it as being common along the whole route followed by him.

Selasphorus alleni. Allen Hummingbird. Noted by Jenkins on the Little Sur River in June and by Pemberton and Anderson on their winter trip. However, on our summer trip we did not encounter the bird. There is no doubt however that it should be included in the list inasmuch as Jenkins took specimens in June from the Transition zone.

Aeronautes melanoleucus. White-throated Swift. Noted by Pemberton and Anderson in large numbers in the Big Sur River country, and by Jenkins occasionally on Big Creek. We found the bird very numerous across the divide from San Antonio Creek and south of Big Creek. At one place there were hundreds of the birds flying in and out of cavities in a cliff exposed in the forest. These birds were undoubtedly nesting at the time, but the cliff was so inaccessable that we did not investigate any of the cavities. Several birds were shot but all reached their homes before falling so we did not secure any birds. They were not noticed elsewhere on the trip.

Cypseloides niger borealis. Northern Black Swift. Not noted by any of our party, or by Jenkins or Grinnell. R. H. Beck, in CONDOR, vol. I, page 94, notes that the bird was seen at Monterey in June of 1898. The recent operations of Messrs. Vrooman and Dawson along the coast of Santa Cruz County would lead to the belief that the birds are found in similar localities along the Monterey coast. At any rate, on the strength of Mr. Beck's note we will include it in the list of the summer land birds of the county.

Dryobates villosus hyloscopus. Cabanis Woodpecker. Noted fairly commonly during the winter trip; several specimens were taken in the vicinity of the Sur River. Jenkins mentions that it was rarely seen in the redwood canyons though fairly common in the pines of the upper Big Creek. We found the bird on the lower slopes of the moun-

tains in the San Antonio Creek basin; and on the summit of Santa Lucia Peak a specimen was taken in breeding condition. The bird is not common, but may be expected over most of the Transition zone.

Dryobates pubescens turati. Willow Woodpecker. Noted on the lower slopes of Santa Lucia Peak during our summer trip. Pemberton and Anderson noted it as quite a common winter bird in the Big Sur district in December of 1903. Jenkins did not find it along the coast in summer, and it is probable that it remains only in the valley east of the big mountains to breed.

Dryobates nuttalli. Nuttall Woodpecker. Noted only at Jolon in the Upper Sonoran zone. Not a common bird.

Melanerpes formicivorus bairdi. California Woodpecker. A very numerous bird from the oak flats in the Jolon and San Antonio regions to the deep redwood canyons near the coast. Noted by Jenkins as common everywhere. In December we found it very numerous in the Big Sur River district also. The bird likes to perch on the loftiest

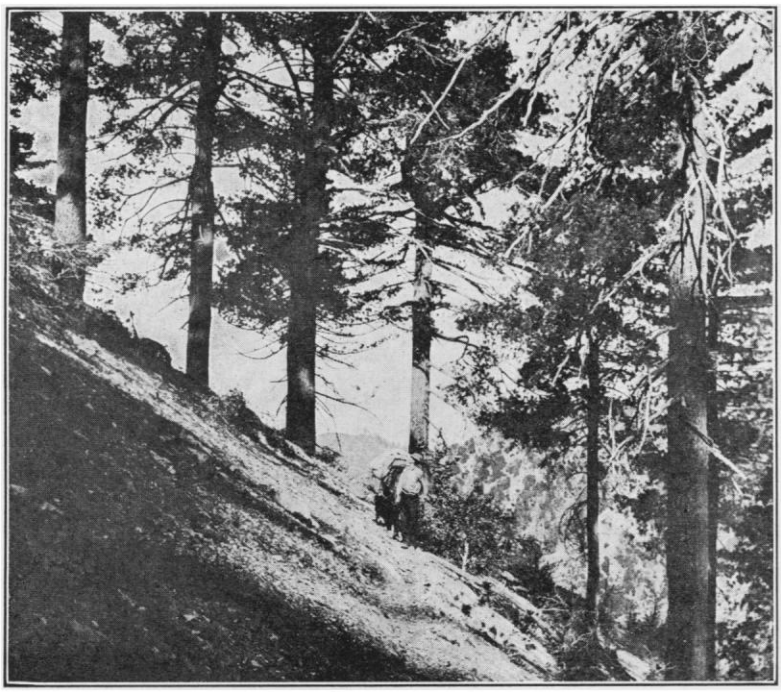

Fig. 66. YELLOW PINES IN THE TRANSITION ZONE OF SANTA LUCIA PEAK

twig of a dead redwood tree in the forested part of the ranges. During the summer months there is a terrible pest of large flies, and it is on these flies that this woodpecker feeds to a large extent when in the forested zone.

Colaptes cafer collaris. Red-shafted Flicker. Common bird everywhere, from the tops of the ridges to the sea-shore and from the sea-shore to the interior valley. Also very common in December.

Nuttallornis borealis. Olive-sided Flycatcher. Fairly common bird in the Transition zone. Several were seen building nests, and one set of eggs was taken on May 31 in Big Creek. They prefer the yellow pine forests to the redwoods, and thus they may be found on the upper slopes.

Myiochanes richardsoni richardsoni. Western Wood Pewee. Seen both along the coast in the redwood forests and in the interior valleys on San Antonio Creek.

Empidonax difficilis difficilis. Western Flycatcher. Common bird in the redwood forests and also in the San Antonio Creek and Santa Lucia Peak regions.

Sayornis nigricans. Black Phoebe. Not a very common bird, but noted both along the coast and in the San Antonio Creek country. Prefers open country.

Myiarchus cinerascens cinerascens. Ash-throated Flycatcher. Noted as an uncommon bird, but widely distributed. One set of eggs taken near the coast from a redwood stump.

Tyrannus verticalis. Western Kingbird. Occurs rather uncommonly over all the region.

Otocoris alpestris actia. California Horned Lark. Jenkins noted this bird as being quite common in the open fields along the entire seacoast, but we did not meet with it. In winter Pemberton and Anderson found it rather common north of the Big Sur River where there are many open fields.

Hylocichla guttata slevini. Monterey Hermit Thrush. This bird was noted only in the deep redwood groves and is either very secretive or uncommon. Grinnell noted the bird in June in the Big Creek country, though Jenkins failed to meet with it.

Hylocichla ustulata ustulata. Russet-backed Thrush. Noted as an uncommon bird in both the San Antonio Creek region and in the redwood belt.

Sialia mexicana occidentalis. Western Bluebird. Common in the San Antonio Creek region, but only noted once on the coast side of the mountains. Jenkins speaks of it as common in the upper Big Creek region, but we failed to find more than one pair of birds. Should be one of the regular summer residents.

Toxostoma redivivum redivivum. California Thrasher. Noted in the dryer parts of the San Antonio Creek valley and on the lower slopes of Santa Lucia Peak. Not noted in the Transition zone excepting in the winter when one bird was seen in the Big Creek valley.

Cinclus mexicanus unicolor. American Dipper. This bird is common along all of the streams which flow from the redwood and pine forests. In all of the canyons on the ocean side and in the upper part of San Antonio Creek the Ouzel was a common bird. Many nests were found containing young birds, as also several unfinished nests. This bird is rather typical of the Transition zone.

Thryomanes bewicki drymoecus. San Joaquin Wren. Fairly common bird over the whole region. A series of these birds is needed to determine the status, as Jenkins' specimens, taken in worn post-nuptial plumage, were with difficulty determined by Grinnell as belonging to this race, and possibly should be placed with the San Diegan form, *Thryomanes bewicki charienturus*. We unfortunately took no specimens.

Troglodytes aedon parkmani. Western House Wren. Common bird everywhere. Also taken in winter at Sur River.

Nannus hiemalis pacificus. Western Winter Wren. Not uncommon in the deep redwood forests near the coast. A nest ready for eggs was found by Carriger on May 26. It was placed at the base of a great redwood tree among the ferns and fallen bark of the tree.

Salpinctes obsoletus obsoletus. Rock Wren. This bird was observed quite commonly in the winter in the Sur River region and is supposed to have been the bird spoken of by Ray in the *Osprey* of September, 1900, as the Canyon Wren. Jenkins did not meet with it nor did we see it; but we fairly certainly recognized it on one occasion from the song. It will probably be found to be a summer resident in favorable localities.

Chamaea fasciata fasciata. Intermediate Wren-tit. Common bird in the San Antonio Creek basin and noted often along the more brushy parts of the coastal slopes. Jenkins found it abundant along his route. We found it to be common also in the winter.

Polioptila caerulea obscura. Western Gnatcatcher. Found only in the oak groves about Jolon where Carriger took two sets of eggs on May 16. Both of these nests were in blue oak trees and some distance from the ground.

Progne subis hesperia. Western Martin. Seen only on the coastal slopes and in the pine and redwood belts. In the Big Creek region it was especially numerous.

Petrochelidon lunifrons lunifrons. Cliff Swallow. Seen in the vicinity of Jolon, and Jenkins met with it south of Carmel on the seacoast. Probably does not remain in the redwood zone to breed.

Riparia riparia. Bank Swallow. Noted only in the Lower Sonoran zone in the vicinity of King City.

Tachycineta thalassina lepida. Violet-green Swallow. This was a very common bird over the whole of the Transition and Upper Sonoran zones. In the vicinity of Lucia

and Big Creek large numbers of these birds were breeding in cavities in old trees, principally yellow pines. Not noted commonly in the redwood zone, as it prefers the higher and dryer slopes where the pines and firs grow.

Phainopepla nitens. Phainopepla. The Phainopepla was an uncommon bird in the oak groves in the San Antonio valley. No females were seen, and it was supposed that they might be on the nest. On June 6 we saw a pair with four young birds just able to fly.

Lanius ludovicianus gambeli. California Shrike. Seen only in the Lower Sonoran zone near Kings City.

Vireosylva gilva swainsoni. Western Warbling Vireo. Noted as being rather uncommon about the San Antonio Creek region where they were building nests on May 21. On May 31 on upper Big Creek we took a set of eggs.

Fig. 67. VIEW TYPICAL OF THE YELLOW PINE FOREST AT ABOUT 3000 FEET ALTITUDE ON THE COASTAL MOUNTAINS

Lanivireo solitarius cassini. Cassin Vireo. An uncommon bird, in the redwood and pine zone only.

Vireo huttoni huttoni. Hutton Vireo. Seen at San Antonio Creek and Santa Lucia Peak. Jenkins took a specimen from the upper Big Creek and we saw a good many birds in December along the coast. An uncommon bird.

Sitta carolinensis aculeata. Slender-billed Nuthatch. Fairly common bird in the redwood and pine belts, and also seen on the eastern side of the coastal mountains in the San Antonio Creek basin. On May 18 Carriger took a set of eggs from the stump of a fallen white oak in the San Antonio region.

Sitta pygmaea pygmaea. Pigmy Nuthatch. One bird was seen in the redwood forest of Lime Kiln Creek, and a pair in the pines near Big Creek.

Baeolophus inornatus inornatus. Plain Titmouse. Noted in the pines near the sum-

mit of the coast range. Jenkins found it only in the Big Creek basin. On our winter trip it was also an uncommon bird and only found on the summits of the brushy ridges.

Penthestes gambeli gambeli. Mountain Chickadee. Noted occasionally in the higher growths of pines. Seen near the summit of Santa Lucia Peak and along the ridge between San Antonio Valley and the coast.

Penthestes rufescens barlowi. Santa Cruz Chickadee. Not noted on our summer trip, though we were continually on the lookout for it. Noted, however, by both Grinnell and Jenkins along the coast in summer, and Pemberton and Anderson found it to be a common bird in winter. Probably an uncommon bird in the southern part of this county in summer.

Psaltriparus minimus minimus. Coast Bush-tit. Rather common bird in all of the more brushy parts of the entire region with the exception of the damp redwood forests.

Corvus brachyrhynchos hesperis. Western Crow. Crows were so numerous on the

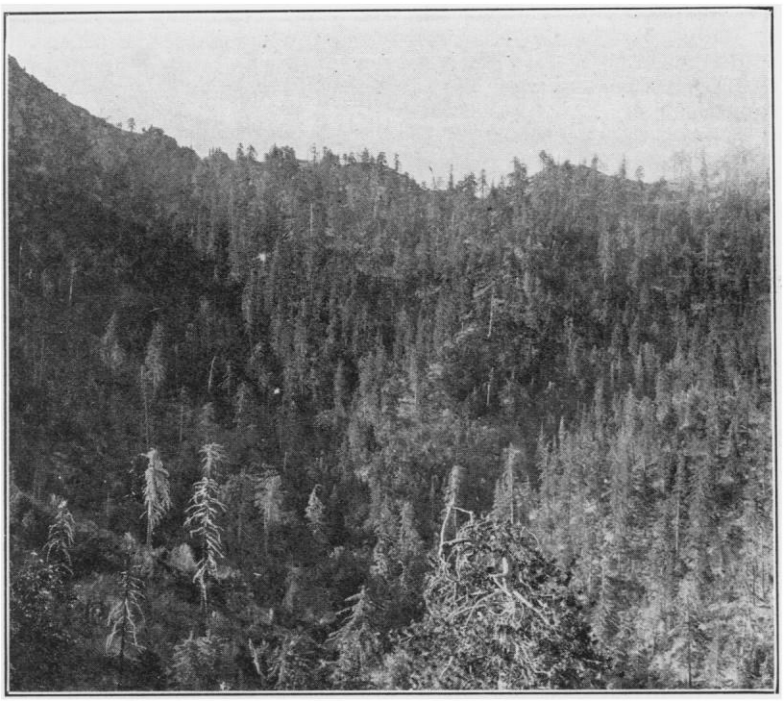

Fig. 68. GENERAL ASPECT OF THE PINE AND FIR FORESTS ALONG THE CREST OF THE COASTAL MOUNTAINS; HOME OF WESTERN TANAGER AND AUDUBON WARBLER

upper San Antonio Creek as to be a nuisance. Noted on the coastal side of the mountains at an elevation of 2300 feet, and also north of the Little Sur River in the more open country, where it was also seen in winter.

Pica nuttalli. Yellow-billed Magpie. Very common bird in the upper San Antonio Creek valley. On May 18 several nests examined contained large young. While noted in winter on the Big Sur River, and recorded from Partington canyon in summer by Jenkins, it was not met with by our party in summer along the coast. It probably stays on the oak flats of the Upper Sonoran valleys almost entirely.

Aphelocoma californica californica. California Jay. A common bird in the San Antonio Valley, and seen occasionally on the coast, though away from the oak groves it is rather rare. In the redwood forests scarcely ever seen. In winter it was noted commonly south from Monterey to the Sur River wherever there were oak groves.

Cyanocitta stelleri carbonacea (near **frontalis**). Coast Jay. A very common bird in

the redwoods and pines of the coast slopes from Monterey south. In winter also a common bird. Our summer and winter specimens agree with those taken by Jenkins in showing an intermediate stage between *carbonacea* and *frontalis*. Carriger took a set of four eggs on May 26 from the limb of an oak tree overhanging the water.

Certhia familiaris occidentalis. Tawny Creeper. A common bird in the redwood zone along the coast. Several nests were found, all containing young birds, near the latter part of May. In winter this bird is gregarious, and large flocks of them were seen on the Sur River in December.

Vermivora celata lutescens. Lutescent Warbler. Noted occasionally in the redwood belt.

Dendroica aestiva brewsteri. California Yellow Warbler. Not an uncommon bird in the willows along San Antonio Creek. Not noted on the coastal slopes.

Dendroica auduboni auduboni. Audubon Warbler. It was rather a surprise to us to find this bird so numerous in summer. In winter it is a common enough bird almost everywhere, and a part of them evidently remain to breed in the redwood and pine forests along the coast. In the yellow pines near the summit of the coastal slopes this bird was to be found every day. Several were taken with ovaries highly developed and two pairs were seen building their nests, but no eggs were taken.

Dendroica nigrescens. Black-throated Gray Warbler. Noted commonly in the San Antonio Creek basin, on the summit of Santa Lucia Peak, and over the eastern slopes of the coastal range, but not in the redwoods. This bird prefers a dryer locality than the redwood belt. One was seen building a nest on May 21.

Oporornis tolmiei. Tolmie Warbler. One pair of these birds was seen on June 4 in the San Antonio Creek basin. The birds were feeding in some golden oaks on a hillside. It is probably an unusual summer resident.

Icteria virens longicauda. Long-tailed Chat. A fairly common bird in the willow thickets along the San Antonio Creek. Not noted on the coast.

Wilsonia pusilla chryseola. Golden Pileolated Warbler. Recorded by Jenkins from the Little Sur River in June. Noted by our party only at Jolon where several were seen in the willows of San Antonio Creek.

Piranga ludoviciana. Western Tanager. This is one of the typical Transition zone species, and was noted on the summit of Santa Lucia Peak and throughout the yellow pine forests of the coastal slopes. It was fairly numerous and associated with the Audubon Warblers. A pair was seen building a nest on May 31.

Euphagus cyanocephalus. Brewer Blackbird. Noted in the San Antonio Creek basin as a common species though not seen on the coast. Jenkins mentions it as occurring at a few points along the coast. Noted in winter in the Sur River canyon by Pemberton and Anderson.

Icterus bullocki. Bullock Oriole. A fairly common bird on the oak flats about the head of the San Antonio Valley, where a set of eggs was taken on May 18. Not seen on the coast.

Agelaius phoeniceus californicus. Bi-colored Red-wing. Seen in the grain fields and along the stream in the San Antonio Valley.

Sturnella neglecta. Western Meadowlark. Common resident from Monterey south to the Little Sur River where the forests begin. In the San Antonio Creek valley it was common in June. Not found in the forested part of the region.

Dolichonyx oryzivorus. Bobolink. Geo. F. Breninger reported in THE CONDOR, vol. I, page 93, the taking of a Bobolink near Monterey on October 14, 1896.

Spinus pinus pinus. Pine Siskin. Common bird on coastal slopes both winter and summer.

Astragalinus tristis salicamans. Willow Goldfinch. Noted in the willows along the San Antonio Creek.

Astragalinus psaltria hesperophilus. Green-backed Goldfinch. Noted commonly in the San Antonio valley and rarely on the coastal side. Jenkins found it all along the coast.

Astragalinus lawrencei. Lawrence Goldfinch. One bird seen on the Upper San Antonio Creek on May 19. Probably an uncommon bird.

Carpodacus purpureus californicus. California Purple Finch. Noted in the yellow pine forests on the upper slopes along the coast. A pair was seen building a nest on

May 31. Noted in winter as a common bird in the Sur River country. Jenkins also noted the bird on the Little Sur and among the pines of the upper Big Creek in June.

Carpodacus mexicanus frontalis. California Linnet. Noted all over the county, more numerous in the San Antonio valley than on the coast.

Chondestes grammacus strigatus. Western Lark Sparrow. Seen sparingly along the coast on open hillsides and in rather brushy places but not in the forests. Eggs were taken on May 30 from a nest on the ground at the foot of a yellow pine near the summit at the head of Big Creek.

Aimophila ruficeps ruficeps. Rufous-crowned Sparrow. Noted only at Jolon in a sage patch. Jenkins found it a common bird along the coast from Posts to Mt. Mars.

Amphispiza belli. Bell Sparrow. Noted on dry hillsides at the head of San Antonio Creek, on the slopes of Santa Lucia Peak, and near Jolon, though not on the coastal side excepting in winter when it was a common bird in the Sur River country.

Junco oreganus pinosus. Point Pinos Junco. A fairly common bird in the pine forests on both sides of the coastal mountains. Young birds out of the nest were seen

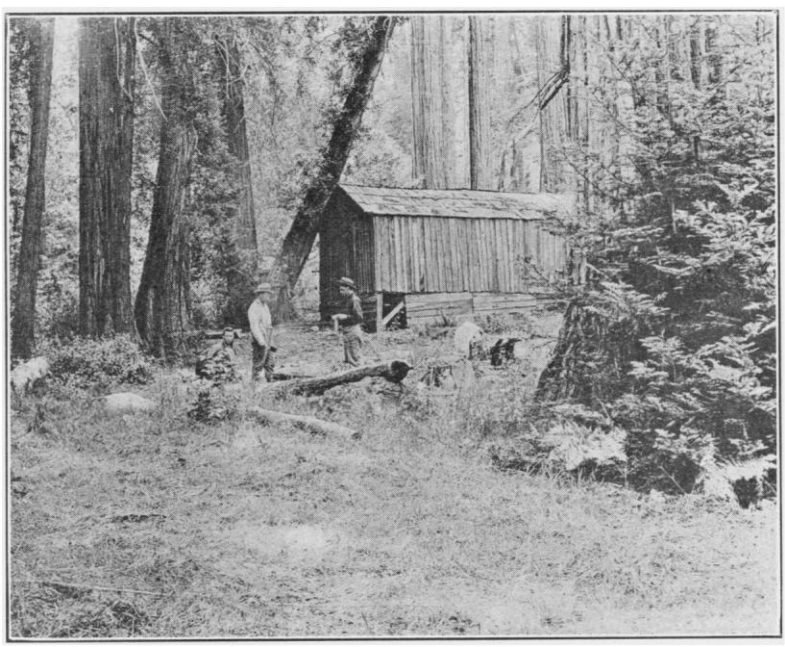

Fig. 69. IN THE REDWOOD BELT CLOSE TO THE COAST; HOME OF TAWNY CREEPER, COAST JAY, AND MONTEREY HERMIT THRUSH

on May 23, and several sets of eggs were taken later in the season. Noted by Grinnell and Jenkins as a common bird in summer, and Pemberton and Anderson found it a numerous bird in the winter in the Sur River district.

Spizella passerina arizonae. Western Chipping Sparrow. Noted as a common bird in the pine forests along the coast, and several sets of eggs were taken. Jenkins also noted it in June on the upper Big Creek.

Spizella atrogularis. Black-chinned Sparrow. Taken near the top of Santa Lucia Peak and not seen elsewhere.

Zonotrichia leucophrys gambeli. Nuttall Sparrow. Noted as a very common bird near the coast, where it stays at the lower levels in the lupines and low brush.

Melospiza melodia santaecrucis. Santa Cruz Song Sparrow. Noted everywhere in favorable localities: along San Antonio Creek, at a small spring on the side of Santa Lucia Peak at an elevation of 3500 feet, and at the mouths of all the streams entering the ocean on the coast side.

Pipilo maculatus falcifer. San Francisco Towhee. Noted on the upper slopes of Santa Lucia Peak and commonly all over the coastal slopes. Is a common resident.

Pipilo crissalis crissalis. California Brown Towhee. Rather common bird throughout the region in both the Upper Sonoran and Transition zones.

Passerina amoena. Lazuli Bunting. Noted at Jolon and on the coastal slopes where it was often seen in the dryer brush patches. Jenkins speaks of it as rather more common than we observed it to be.

Zamelodia melanocephala capitalis. Pacific Black-headed Grosbeak. Noted on the upper slopes of Santa Lucia Peak and in the pine forests along the summit of the coastal mountains at the head of Big Creek. Jenkins met it commonly in many localities.

Passer domesticus. English Sparrow. A common bird around the little town of Jolon, though not noted away from settlements.

The following list of the winter visitors noted on the winter trip of Pemberton and Anderson gives a further idea of the character of the region.

Sphyrapicus varius ruber or daggetti. Red-breasted Sapsucker.
Planesticus migratorius propinquus. Western Robin.
Ixoreus naevius naevius. Varied Thrush.
Regulus calendula grinnelli. Sitka Kinglet.
Sialia currucoides. Mountain Bluebird.
Anthus rubescens. American Pipit.
Bombycilla cedrorum. Cedar Waxwing.
Dendroica townsendi. Townsend Warbler.
Sayornis sayus. Say Phoebe.
Passerculus sandwichensis sandwichensis. Western Savannah Sparrow.
Zonotrichia coronata. Golden-crowned Sparrow.
Passerella iliaca iliaca. Fox-colored Sparrow. (See CONDOR, x, p. 50.)
Passerella iliaca meruloides. Yakutat Fox Sparrow.

San Francisco, June 6, 1915.

FROM FIELD AND STUDY

Range of the California Clapper Rail.—While reading recently Mr. Wells W. Cooke's excellent bulletin on the North American Rails (Bull. U. S. Dept. Agric. no. 128), my attention was attracted to the fact that the range of the California Clapper Rail (*Rallus obsoletus*) as given in this bulletin was very much circumscribed and did not include the sloughs radiating from Monterey Bay.

It is a well known fact among working ornithologists in this immediate section that Elkhorn Slough, Tembladero Slough, and other salt water marshes tributary to Monterey Bay are regularly but rather sparingly inhabited by these birds. They are constant residents of the sections that they frequent. My friend, Mr. A. G. Vrooman of Santa Cruz, has a set of eggs taken a few years ago by his son near Elkhorn, Monterey County, —a small siding on the line of the Southern Pacific Railroad. Eggs have also been taken near the same place by Mr. Thomas Hudson of Watsonville.

These records extend the range of this Rail some eighty miles to the south and, taken in connection with the Humboldt records of this bird as given by Mr. Tracy I. Storer in the CONDOR for March, 1915, give it a considerably wider range than would seem to be indicated in Mr. Cooke's bulletin.—O. P. SILLIMAN, *Castroville, California.*

Bird-study Out-of-doors in European Schools.—The Sacramento Chamber of Commerce City Planning Committee brought here, Dr. Hegemann, German City Planning Expert. He suggested obtaining a volunteer to study European City Planning, including nature study methods. This citizen brought from Europe some interesting photographs. The one presented herewith (fig. 70) shows the Royal Hunting Lodge in the Copenhagen Deer Park, with blind school students enjoying a nature study outing.

The report states that nature study field excursions in Europe are as far in advance